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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|----------------|----------------------|---------------------|------------------|
| 10/522,352 | 01/26/2005 | Manfred Korthauer | KORTHAUER 3 PCT | 7972 |
| 25889 | 7590 07/09/200 | 7 | EXAMINER | |
| WILLIAM CC COLLARD & | | | NGUYEN, ANTHONY H | |
| 1077 NORTHERN BOULEVARD ROSLYN, NY 11576 | | | · ART UNIT | PAPER NUMBER |
| KOSETN, IVI | 113.70 | | 2854 | |
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| | | | 07/09/2007 | ' ♥ PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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| | | Application No. | Applicant(s) | |
| | | 10/522,352 | KORTHAUER, MANFRED | |
| | Office Action Summary | Examiner | Art Unit | |
| | | Anthony H. Nguyen | 2854 | _ |
| Period fo | The MAILING DATE of this communication apport Reply | pears on the cover sheet with | ı the correspondence address | |
| WHI(- Exte after - If NO - Failu Any | ORTENED STATUTORY PERIOD FOR REPL' CHEVER IS LONGER, FROM THE MAILING Domisions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. Disperiod for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing led patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNIC, 36(a). In no event, however, may a reposite a polymer of the second will expire SIX (6) MONTIC, cause the application to become ABA | ATION. bly be timely filed HS from the mailing date of this communication. NDONED (35 U.S.C. § 133). | |
| Status | | · · | | |
| 1)⊠ | Responsive to communication(s) filed on 23 A | <u>pril 2007</u> . | | |
| 2a)⊠ | This action is FINAL . 2b) ☐ This | action is non-final. | | |
| 3)[| Since this application is in condition for allowar | nce except for formal matte | rs, prosecution as to the merits is | |
| | closed in accordance with the practice under E | Ex parte Quayle, 1935 C.D. | 11, 453 O.G. 213. | |
| Disposit | ion of Claims | | • | |
| 5)□ 6)⊠ 7)□ | Claim(s) 14-23 is/are pending in the application 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) 14-23 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or | wn from consideration. | | |
| Applicat | ion Papers | | | |
| 9)[| The specification is objected to by the Examine | er. | | |
| 10)[| The drawing(s) filed on is/are: a) _ acc | epted or b) objected to b | y the Examiner. | |
| | Applicant may not request that any objection to the | drawing(s) be held in abeyand | e. See 37 CFR 1.85(a). | |
| | Replacement drawing sheet(s) including the correct | | | |
| 11) | The oath or declaration is objected to by the Ex | kaminer. Note the attached | Office Action or form PTO-152. | |
| Priority (| under 35 U.S.C. § 119 | | | |
| а) | Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureau See the attached detailed Office action for a list | s have been received. s have been received in Aprity documents have been received in Aprity documents have been received. | plication No eceived in this National Stage | |
| Attachmen | nt(s) | · | ` | |
| 2) Notice 3) Information | ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date | Paper No(s) | mmary (PTO-413) Mail Date ormal Patent Application | |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 22 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, the specification, as original filed, does not provide support for the drive which has a piezo-actuator as now claimed.

Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Claims 14, 17,18, 21 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Leys et al. (US 3,735,702).

A person shall be entitled to a patent unless --

⁽b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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With respect to claim 21, Leys et al. teaches a device for printing on a sheet or an object o 16 having a thermal print head 17, means 24 for supply the sheet or object, a drive 46-51 for moving the thermal printing head parallel to or counter to the feed direction of the sheet or the object to be printed and a controller 34 which controls the movement of the print head positions (Leys et al. Figs.1 and 2, col.4 lines 26-31 and col. 6 lines 25-44). With respect to claim 14, the use of a means for recording the supply speed of the sheet or object is inherently used in Leys et al. since the controller 34 which controls the movement of the sheet or object for processing an image signal fed to the thermal head for printing (Leys et al., col. 4 lines 26-31). With respect to claims 17, 18 and 23, Leys et al. teaches a second drive which is a cam disk 42 for moving the thermal print head against the action of a spring element 55 onto the sheet or the object to be printed and away from the object.

Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 15, 16 and 20 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Leys et al. (US 3,735,702) in view of Kikuchi (US 4,542,690).

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With respect to claims 15 an 20, Leys et al. teaches a device for printing on a sheet or an object having substantially the structure as recited. Leys et al. does not teach the drive which is a slider-crank mechanism. Kikuchi teaches a device for printing having a slider-crank mechanism 16,17, 19, 20, 22, 24, 25 which drives a print head 5 for printing on a label web 1 against the platen or a plate-shaped counterbearing 23 as shown in Figs.1 and 2 of Kikuchi. In view of the teaching of Kikuchi, it would have been obvious to one of ordinary skill in the art to modify the printing device of Leys et al. by substituting the slider-rank mechanism for driving the print head as taught by Kikuchi for quickly moving of the print head in a feeding direction or counter to the feeding direction of the sheet or the object to be printed. With respect to claim 16, it is well known to make elements adjustable where needed (see MPEP 2144.04; In re Stevens, 212 F. 2d 197, 101 USPQ 284 (CCPA 1954)). For example, Kikuchi shows that the stroke length of the print head 5 can be adjusted by an adjust element (no numeral reference) to the left a rod 20 in Fig.2 of Kikuchi.

Claims 19 and 22 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Leys et al. (US 3,735,702) in view of Ehrhardt (US 5,978,004).

Leys et al. teaches all that is claimed, except the thermal print head which has a piezo-actuator. See the explanation of Leys et al. above. Ehrhardt teaches a thermal print head 11 having a piexo-actuator 25 that actuates the print head for printing on a label 5 as shown in Figs. 3 and 4 of Ehrhardt. In view of the teaching of Ehrhardt, it would have been obvious to one of ordinary skill in the art to modify the thermal print head of Leys et al. by providing the print head having a piezo-actuator for the

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advantage of providing an alternative print head giving an user a choice of a print head corresponding to a desired printing configuration.

Response to Arguments

Applicants' arguments filed on April 23, 2007 have been fully considered but they are not persuasive of any error in view of the new ground(s) of rejection(s).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

The patents to Sawada et al. and Dalziel et al. are cited to show other structures having obvious similarities to the claimed structure.

Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Nguyen whose telephone number is (571) 272-2169.

The examiner can normally be reached daily from 9 AM to 5PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen, can be reached on (571) 272-2258.

The fax phone number for this Group is (571) 273-8300.

Anthony Nguyen 07/02/2007

Patent Examiner

Technology Center 2800